

I Claim:

1. In a semiconductor memory device having a memory area with storage elements, selectable access line devices respectively connected to the storage elements, and a sense-amplifier device with a potential-sensing connection and a current-supply connection, a selection device comprising:

switching devices each associated with and connected to a respective one of the access line devices for accessing the storage elements in the memory area, each of said switching devices:

controllably connecting, upon selection, the respective associated access line device to the potential-sensing connection for detecting an electrical potential on the respective access line device and to the current-supply connection for supplying a compensating current to the respective access line device; and

having first and second switching elements and, during operation, said first switching element connecting the associated access line device to the potential-sensing connection and said second switching element connecting the associated access line device to the current-supply connection.

2. The selection device according to claim 1, wherein said first and second switching elements are respectively connected in parallel with one another.

3. The selection device according to claim 1, wherein said first and second switching elements each produce two switching states.

4. The selection device according to claim 3, wherein said two switching states include a connected switching state and a disconnected switching state.

5. The selection device according to claim 3, wherein said two switching states include a contact-making switching state and an isolating switching state.

6. The selection device according to claim 3, wherein, in a first of said two switching states, said first switching element makes a comparatively low-impedance contact.

7. The selection device according to claim 3, wherein, in a first of said two switching states, said first switching element makes a comparatively low-impedance contact to the potential-sensing connection on the sense-amplifier device.

8. The selection device according to claim 3, wherein, in a first of said two switching states, said first switching element makes a low-impedance contact as compared to a contact of said second switching element.

9. The selection device according to claim 3, wherein, in a first of said two switching states, said first switching element makes a low-impedance contact to the potential-sensing connection as compared to a contact of said second switching element.

10. The selection device according to claim 1, wherein said first and second switching elements are transistor devices.

11. The selection device according to claim 1, wherein said first and second switching elements are MOSFETs.

12. The selection device according to claim 10, wherein respective drain regions of said transistor device are connected to the respectively connected one of the access line devices.

13. The selection device according to claim 12, wherein a source region of said transistor devices are each respectively connected to one of the respective potential connection and

the respective current-supply connection on the associated sense-amplifier device.

14. The selection device according to claim 10, wherein a source region of said transistor devices are each respectively connected to one of the respective potential connection and the respective current-supply connection on the associated sense-amplifier device.

15. The selection device according to claim 10, wherein:

the sense-amplifier device is a single common sense-amplifier device;

said first and second switching elements have output connections; and

a common line device respectively connects said output connections to said single sense-amplifier device.

16. The selection device according to claim 10, wherein:

the sense-amplifier device is a single common sense-amplifier device;

said first and second switching elements have source regions;
and

a common line device respectively connects said source regions
to said single sense-amplifier device.

17. The selection device according to claim 1, wherein:

the access line devices are bit line devices; and

said switching devices are each associated with and connected
to a respective one of the bit line devices.

18. In a semiconductor memory device having a memory area
with storage elements, selectable access line devices
including bit line devices respectively connected to the
storage elements, and a sense-amplifier device with a
potential-sensing connection and a current-supply connection,
a selection device comprising:

switching devices each associated with and connected to a
respective one of the bit line devices for accessing the
storage elements in the memory area, each of said switching
devices:

controllably connecting, upon selection, the respective associated bit line device to the potential-sensing connection for detecting an electrical potential on the respective bit line device and to the current-supply connection for supplying a compensating current to the respective bit line device; and

having first and second switching elements and, during operation, said first switching element connecting the associated bit line device to the potential-sensing connection and said second switching element connecting the associated bit line device to the current-supply connection.

19. A semiconductor memory device, comprising:

a memory area having storage elements;

selectable access line devices respectively connected to said storage elements;

a sense-amplifier device having a potential-sensing connection and a current-supply connection, said sense-amplifier device connected to said access line devices; and

a selection device having switching devices each associated with and connected to a respective one of said access line devices for accessing the storage elements in the memory area, each of said switching devices:

controllably connecting, upon selection, the respective associated access line device to the potential-sensing connection for detecting an electrical potential on the respective access line device and to the current-supply connection for supplying a compensating current to the respective access line device; and

having first and second switching elements and, during operation, said first switching element connecting the associated access line device to the potential-sensing connection and said second switching element connecting the associated access line device to the current-supply connection.